

What is Claimed:

1 1. A method of preventing a flooding attack on a network
2 server in which a large number of requests are received for
3 connection to a port number on the server, comprising:

4 determining, in response to a request from a host for a
5 connection to a port number on the server, if the number of
6 connections to the port assigned to the host exceeds a
7 prescribed threshold, and, if so,

8 denying the request for a connection.

9 2. The method of claim 1 in which denying the request
10 further comprises:

11 overriding the denial and allowing the request if a
12 quality of service parameter pertaining to the requesting
13 host permits the override.

14 3. The method of claim 2 wherein a connection request is
15 denied in any event if the number of available connections
16 to the port are less than a constrained threshold.

17 4. The method of claim 1 or claim 2 or claim 3 further
18 comprising:

3 calculating the prescribed threshold by multiplying a
4 percentage P by the number of available connections
5 remaining for the port.

1 5. Apparatus for preventing a flooding attack on a network
2 server in which a large number of requests are received for
3 connection to a port number on the server, comprising:

4 means for determining, in response to a request from a
5 host for a connection to a port number on the server, if the
6 number of connections to the port assigned to the host
7 exceeds a prescribed threshold, and

8 means responsive to the determining means for denying
9 the request for a connection.

10 6. The apparatus of claim 5 in which means for denying
11 further comprises:

12 means responsive to a quality of service parameter
1 pertaining to the requesting host for overriding a request
2 denial and allowing the request.
3

1 7. The apparatus of claim 6 further comprising:

2 means for denying a connection request in any event if
3 the number of available connections to the port are less

4 than a constrained threshold.

1 8. The apparatus of claim 5 or claim 6 or claim 7 further
2 comprising:

3 means for calculating the prescribed threshold by
4 multiplying a percentage P by the number of available
5 connections remaining for the port.

1 9. A storage media containing program code segments for
2 preventing a flooding attack on a network server in which a
3 large number of requests are received for connection to a
4 port number on the server, comprising:

5 a first code segment activated in response to a request
6 from a host for a connection to a port number on the server
7 for determining if the number of connections to the port
8 assigned to the host exceeds a prescribed threshold, and

9 a second code segment responsive to the first code
10 segment for denying the request for a connection.

1 10. The media of claim 9 in which the second code segment
2 further comprises:

3 a third code segment for overriding the denial and
4 allowing the request if a quality of service parameter

5 pertaining to the requesting host permits the override.

1 11. The media of claim 10 further comprising a fourth code
2 segment for denying a connection request in any event if the
3 number of available connections to the port are less than a
4 constrained threshold.

1 12 . The media of claim 9 or claim 10 or claim 11 further
2 comprising:

3 a fifth code segment for calculating the prescribed
4 threshold by multiplying a percentage P by the number of
5 available connections remaining for the port.

1 13. A carrier wave containing program code segments for
2 preventing a flooding attack on a network server in which a
3 large number of requests are received for connection to a
4 port number on the server, comprising:

5 a first code segment activated in response to a request
6 from a host for a connection to a port number on the server
7 for determining if the number of connections to the port
8 assigned to the host exceeds a prescribed threshold, and

9 a second code segment responsive to the first code
10 segment for denying the request for a connection.

1 14. The carrier wave of claim 13 in which the second code
2 segment further comprises:

3 a third code segment for overriding the denial and
4 allowing the request if a quality of service parameter
5 pertaining to the requesting host permits the override.

1 15. The carrier wave of claim 14 further comprising a
2 fourth code segment for denying a connection request in any
3 event if the number of available connections to the port are
4 less than a constrained threshold.

1 16. The carrier wave of claim 13 or claim 14 or claim 15
2 further comprising:

3 a fifth code segment for calculating the prescribed
4 threshold by multiplying a percentage P by the number of
5 available connections remaining for the port.